

ZHAO ET AL.
"GPS Assistance Messages in Cellular
Communications Networks And Methods Therefor"
Atty. Docket No. CS90038

Appl. No. 09/785,960
Confirm. No. 2853
Examiner K. Ferguson
Art Unit 2682

REMARKS

Request for Reconsideration, Informal Matters, Claims Pending

The non-final Office Action mailed on 10 March 2005 has been considered carefully. Reconsideration of the claimed invention in view of the amendments above and the discussion below is respectfully requested.

Claims 1-10, 16-18 and 25-28 are pending.

Response to Non-Statutory Subject Matter Rejection

Rejection Summary

Claims 16-18 stand rejected under 35 USC 101 as being drawn to non-statutory subject matter allegedly because the ephemeris data issue identifier is "... considered to be functional descriptive material. Office Action, 9 August 2004, para. 3.

Discussion

Claims 16-18 have been amended to recite a "...satellite positioning system ephemeris data issue identifier signal" The claims now state explicitly what was implied by the original field of use limitation "...for transmission to a satellite positioning system enabled mobile station in a cellular communications network..." in Claim 16.

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The identifier includes a "first field with satellite identifier data" and a "second field with an ephemeris sequence number". The "ephemeris data issue identifier signal" is used to indicate when the mobile station needs to read and store a corresponding ephemeris data (e.g., by obtaining an ephemeris assistance message from the network). See MPEP 2106, IV, B(c) "Natural Phenomena Such as Electricity and Magnetism". Thus the subject matter of Claims 16-18 is statutory. Kindly withdraw the rejection under 35 U.S.C. 101.

Allowability of Claims Over Kingdon & Chen

Rejection Summary

Claims 16-18 stand rejected under 35 USC 103(a) as being anticipated by Publication No. US 2001/0014604 A1 (Kingdon) in view of U.S. Paten No. 6,611,756 (Chen). Official Action, 10 March 2005.

Discussion of Claim 16

Regarding independent Claim 16, Kingdon and Chen fail to disclose or suggest a

satellite positioning system ephemeris data issue identifier signal for transmission to a satellite positioning system enabled mobile station in a cellular communications network, the satellite positioning system ephemeris data issue identifier signal comprising:

- a first field with satellite identifier data; and
- a second field with an ephemeris sequence number.

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Neither Kingdon nor Chen disclose an ephemeris data issue identifier. The Examiner concedes that Kingdon fails to disclose "... a first field with satellite identifier data; and a second field with an ephemeris sequence number...." The Examiner's reliance on Chen to meet the deficiencies of Kingdon is misplaced. In FIG. 1a, referenced by the Examiner, Chen illustrates the complete NAVSTAR GPS navigation data set transmitted by the NAVSTAR GPS satellites. The navigation data disclosed by Chen is not a "...system ephemeris data issue identifier for transmission to a satellite positioning system enabled mobile station in a cellular communications network..." as recited in Claim 16.

As noted, the concept of using an "ephemeris data issue identifier" to indicate when a mobile station needs to read and store a corresponding ephemeris data (e.g., by obtaining an ephemeris assistance message) is not disclosed or suggest by Kingdom of Chen. Therefore there is no reason why one of ordinary skill in the art would combine information from the GPS navigation message with the message of Kingdom. Moreover, as noted above, the message disclosed by Kingdon is a GPS assistance message, which includes ephemeris data. However, the assistance message of Kingdon is not the same as the claimed "ephemeris data issue identifier", which is used to determine whether the MS must obtain updated ephemeris data. Claim 16 and the claims that depend therefore are thus patentably distinguished over Kingdon and Chen.

Discussion of Claim 17

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Regarding Claim 17, Kingdon and Chen fail to disclose or suggest the ephemeris data issue identifier signal of Claim 16 wherein "... the first field is at least 5 bits, the second field is at least 3 bits." Claim 17 is thus further distinguished over Kingdon and Chen.

Discussion of Claim 18

Regarding Claim 18, Kingdon and Chen fail to disclose or suggest the ephemeris data issue identifier signal of Claim 16 is a "broadcast message". Claim 18 is thus further distinguished over Kingdon and Chen.

Prayer For Relief

In view of the amendments and the discussion above, the Claims of the present application are in condition for allowance. Kindly withdraw any rejections and objections and allow this application to issue as a United States Patent without further delay.

Respectfully submitted,



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